ABSTRACT OF THE DISCLOSURE

This invention provides a method of altering the metabolism of sphingolipids in a cell comprising 5 contacting the cell with a fumonisin, or an analog thereof. The invention also provides a method of detecting the consumption of a fumonisin or a fumonisin analog in a subject comprising (A) detecting, in a sample from the subject, the state of the metabolic pathway of 10 sphingolipids and (B) comparing the state of the metabolic pathway to that of a normal subject, the presence of a change in the state of the metabolic pathway indicating the consumption of a fumonisin or a fumonisin analog. Also provided is a method of detecting the presence of a 15 fumonisin or fumonisin analog contamination in a sample from a food or feed comprising detecting a reaction of the metabolic pathway of sphingolipids, the presence of the reaction indicating the presence of a fumonisin or fumonisin analog contamination. Furthermore, novel 20 fumonisin analogs and compositions comprising fumonisins and fumonisin analogs are provided.

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